COMPLETE LISTING OF CLAIMS

IN ASCENDING ORDER WITH STATUS INDICATOR

Claims 1-14 (Canceled)

15. (Currently amended) A conjugate comprising a bacterial superantigen and an antibody moiety, wherein

the superantigen is staphylococcal enterotoxin E (SEE), SEQ ID NO: 7, ~~is a low titer superantigen~~ comprising regions A to E~~, which region A is a TCR binding site, and regions B to E determine the binding to MHC class II molecules~~; and

the amino acid sequence of the superantigen is substituted so that no more than 15 amino acid residues in region C are replaced with different amino acids, and the amino acid residue positions in region C to be replaced are at least selected from the group consisting of 74, 75, 78, 79, 81, 83 and 84, such that the substituted superantigen has reduced seroreactivity compared to the superantigen from which it is derived; and

the amino acid sequence of the superantigen is substituted so that no more than 15 amino acid residues in region A are replaced with different amino acids, and the amino acid residue positions in region A to be replaced are at least selected from the group consisting of 20, 21, 24 and 27;

and wherein the antibody moiety is a full length antibody or any other molecule binding antibody active fragment, which is directed against a cancer-associated cell surface structure.

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Original) The conjugate of claim 15 further comprising substitutions of no more than 15 amino acid residues in region E.

23. (Original) The conjugate of claim 22, wherein the mutation is at amino acid residue position 227.

24. (Original) The conjugate of claim 23, wherein the SEE amino acid sequence includes the substitutions of R20G, N21T, S24G, R27K, K79E, K81E, K83S, K84S and D227S.

25. (Original) The conjugate of claim 23, wherein the SEE amino acid sequence includes the substitutions of R20G, N21T, S24G, R27K, K79E, K81E, K83S, K84S and D227A.

26. (Original) The conjugate of claim 22, wherein the superantigen has the amino acid sequence of SEQ ID NO: 2.

27. (Original) The conjugate of claim 15, wherein the antibody moiety is a Fab fragment.

28. (Original) The conjugate of claim 27, wherein the Fab fragment is C215Fab.

29. (Original) The conjugate of claim 27, wherein the Fab fragment is 5T4Fab.

30. (Original) The conjugate of claim 29, wherein the superantigen has the amino acid sequence of SEQ ID NO: 1.

31. (Original) The conjugate of claim 27 further comprising a cytokine.

32. (Original) The conjugate of claim 30, wherein the cytokine is an interleukin.

33. (Original) The conjugate of claim 31, wherein the interleukin is IL2 or a derivative thereof having essentially the same biological activity of native IL2.

34. (Original) The conjugate of claim 15, wherein said cancer is selected from the group consisting of lung, breast, colon, kidney, pancreatic, ovarian, stomach, cervix and prostate cancer.

Claims 35-52 (Canceled)

53. (Currently amended) A pharmaceutical composition comprising a therapeutically effective amount of a conjugate, wherein said conjugate comprises a bacterial superantigen and an antibody moiety, wherein

the superantigen is staphylococcal enterotoxin E (SEE), SEQ ID NO: 7, ~~is a low titer superantigen~~ comprising regions A to E, ~~which region A is a TCR binding site, and regions B to E determine the binding to MHC class II molecules;~~ and

the amino acid sequence of the superantigen is substituted so that no more than 15 amino acid residues in region C are replaced with different amino acids, and the amino acid residue positions in region C to be replaced are at least selected from the group consisting of 74, 75, 78, 79, 81, 83 and 84 such that the substituted superantigen has reduced seroreactivity compared to the superantigen from which it is derived; and

the amino acid sequence of the superantigen is substituted so that no more than 15 amino acid residues in region A are replaced with different amino acids, and the amino acid residue positions in region A to be replaced are at least selected from the group consisting of 20, 21, 24 and 27;

and wherein the antibody moiety is a full length antibody or any other molecule binding antibody active fragment, which is directed against a cancer-associated cell surface structure.

54. (Canceled)

55. (Canceled)

56. (Canceled)

57. (Canceled)

58. (Canceled)

59. (Canceled)

60. (Original) The pharmaceutical composition of claim 53 further comprising a substitutions of no more than 15 amino acid residues in region E.

61. (Original) The pharmaceutical composition of claim 60, wherein the mutation is at amino acid residue position 227.

62. (Original) The pharmaceutical composition of claim 60, wherein the SEE amino acid sequence includes the substitutions of R20G, N21T, S24G, R27K, K79E, K81E, K83S, K84S and D227S.

63. (Original) The pharmaceutical composition of claim 60, wherein the SEE amino acid sequence includes the substitutions of R20G, N21T, S24G, R27K, K79E, K81E, K83S, K84S and D227A.

64. (Original) The pharmaceutical composition of claim 59, wherein the superantigen has the amino acid sequence of SEQ ID NO: 2.

65. (Currently amended) The pharmaceutical composition of claim ~~52~~53, wherein the antibody moiety is a Fab fragment.

66. (Original) The pharmaceutical composition of claim 64, wherein the Fab fragment is C215Fab.

67. (Original) The pharmaceutical composition of claim 64, wherein the Fab fragment is 5T4Fab.

68. (Currently amended) The pharmaceutical composition of claim 67, wherein the ~~superantigen~~ conjugate has the amino acid sequence of SEQ ID NO: 1.

69. (Original) The pharmaceutical composition of claim 64 further comprising a cytokine.

70. (Original) The pharmaceutical composition of claim 67, wherein the cytokine is an interleukin.

71. (Original) The pharmaceutical composition of claim 68, wherein the interleukin is IL2 or a derivative thereof having essentially the same biological activity of native IL2.

72. (Currently amended) The pharmaceutical composition of claim ~~52~~53, wherein said cancer is selected from the group consisting of lung, breast, colon, kidney, pancreatic, ovarian, stomach, cervix and prostate cancer.

Claims 73-92 (Canceled)

A2 Conclude